

IN THE CLAIMS

Upon entry of the present amendment, the status of the claims will be as is shown below. This listing of claims replaces all previous versions and listings of claims in the present application.

Listing of claims:

1-14. (Cancelled)

15. (Currently Amended) A method of controlling contact load in an apparatus for mounting electronic components on a substrate, in which a head holding an electronic component is lowered at a first speed to a first position where the electronic component does not contact the substrate, and is lowered at a second speed slower than the first speed from the first position until a predetermined target contact load is detected, the method comprising:

moving the head down by a predetermined distance at the second speed;

measuring contact load after moving the head down; and

determining whether the measured contact load has reached the target contact load, the moving and measuring being repeated until the measured contact load reaches the predetermined target contact load,

wherein the predetermined distance is set at a first predetermined distance when the measured contact load is zero, and is set at a second predetermined distance when the measured contact load exceeds zero, the second predetermined distance being smaller than the first predetermined distance,

wherein the head is incrementally moved downward without being moved upward, and

wherein the head moves in increments of either the first predetermined distance or the second predetermined distance.

16. (Previously Presented) The method of controlling contact load in an apparatus for mounting electronic components according to claim 15, further comprising:

halting the head for a predetermined period of time after moving the head down and before measuring the contact load.

17. (Previously Presented) The method of controlling contact load in an apparatus for mounting electronic components according to claim 15,

wherein the predetermined distance is adjustably set in accordance with the target contact load.

18. (Previously Presented) The method of controlling contact load in an apparatus for mounting electronic components according to claim 15,

wherein the second predetermined distance is adjustably set in accordance with a difference between the measured contact load and the target contact load.

19. (Previously Presented) The method of controlling contact load in an apparatus for mounting electronic components according to claim 15,

wherein, when the measured contact load is the same as the previously measured contact load after the measured contact load exceeds zero, the measuring of the contact load is repeated until a different contact load is measured.

20. (Previously Presented) The method of controlling contact load in an apparatus for mounting electronic components according to claim 15,

wherein the predetermined distance is adjustably set such that the moving and measuring need be repeated until the measured contact load reaches the predetermined target contact load.

21. (Previously Presented) The method of controlling contact load in an apparatus for mounting electronic components according to claim 15,

wherein the predetermined distance is adjustably set within a range of 0.2 μm to several μm .